

# CORRESPONDENCE/MEMORANDUM

*Dennis Mark*  
State of Wisconsin

DATE: October 15, 2003

TO: Al Shea - AD/5

FROM: *SB* Suzanne Bangert - WA/3

SUBJECT: Solid Waste Plan Review

On behalf of the Waste Management Team, this memo is in follow-up to discussion at the June DLT meeting about our review of plans and specifications for solid waste facilities such as landfills, beneficial use requests, landspreading operations, and incinerators. Since most of the time invested in plan review relates to solid waste landfills, this memo will focus on that work and what it accomplishes. In this time of declining resources, we realize that there are legitimate questions about the benefits of solid waste plan review and what can be done to reduce the amount of time dedicated to this function.

## What Landfill Plan Reviews Involve

Landfill plan review is required by state statute and administrative code (Chapter 289, Wis. Stats., and the NR 500 Adm. Code series). A large part of plan review involves siting of landfills. The major steps in the siting process are the Initial Site Report, Feasibility Study, Plan of Operation, Construction Documentation, and Licensure.

During the earlier stages of the siting process, the Initial Site Report and Feasibility Study, the "need" for a new landfill or the expansion of an existing site is determined (s. 289.28, Wis. Stats.) as well as its size. The physical location selected by the landfill applicant is also thoroughly evaluated as is the basic landfill design proposed. Locational issues relating to geology, hydrogeology, proximity to public and private water supply wells, wetlands, airports, etcetera are addressed and resolved. Where appropriate, exemptions are given to codified locational standards.

The Feasibility stage includes the WEPA process which allows the Waste Management Program to receive input from other programs such as Air Management, Watershed Management, Endangered Resources, and Drinking and Groundwater. It also provides the main opportunity for public participation. This may occur through either an informational or contested case hearing. Once the Department approves a Feasibility Study, the site owner may proceed with a Plan of Operation.

The Plan of Operation includes the details on the design of the landfill as well as how it will be constructed, operated, closed and maintained. Also included are cost estimates for closure of the landfill and anticipated regular maintenance for 40 years following closure. Following approval of the Plan of Operation, the initial phase of the landfill is constructed along with necessary support facilities. Documentation of the construction is then submitted for our review and approval.

Prior to initial licensure of a landfill, financial instruments must be submitted to and approved by the Waste Management Program. These instruments must assure funds for closure of the landfill and anticipated general maintenance, or long-term care, for 40 years following closure. While owners are perpetually responsible for their landfills, proof of financial responsibility for long-term care is required only for 40 years beyond closure. Under current law, a landfill owner is not required to establish funds for remediation of environmental problems until a problem is detected.



Following licensure, plan review occurs to address proposed changes to a landfill's design, operation, monitoring, closure, or long-term care and for construction and closure of subsequent phases. A very successful and popular expedited plan modification process (s. NR 514.09, Wis. Adm. Code) has been in existence since 1996 to handle routine changes to approved plans. This process has been expanded once, and further broadening will be proposed in code revisions anticipated to begin in 2004.

### Why Plan Review is Necessary

As mentioned earlier, State statutes and administrative codes mandate plan review. The requirements for plan review developed over time to respond to environmental damage caused by inadequate design, poor location, poorly thought out operational practices, and poor construction. In addition, the public demanded strict standards and an impartial agency to enforce those standards because of their distrust of landfill operators.

In addition, federal rules exist relating to land disposal of municipal solid waste. These federal rules, commonly referred to as Subtitle D of RCRA, cover landfill location, design, operation, monitoring, and financial responsibility. In receiving authorization to implement these federal rules, Wisconsin demonstrated to EPA that we have a comprehensive plan review system that addresses all aspects of Subtitle D and adequate staffing to implement this system. Our plan review process has been successful in maintaining adequate waste disposal capacity for Wisconsin's businesses, industry, and citizens. It also assures that landfills are sited, designed, constructed, operated, closed and maintained in an environmentally acceptable manner protective of Wisconsin citizens and the state's groundwater and other natural resources.

Landfills are different than other waste management facilities in at least three important respects:

- They have no stack or discharge pipe providing immediate feedback on facility performance. Instead, it may take decades for leachate to move through a poorly designed or constructed liner, flow vertically through unsaturated soil to the groundwater table, and then laterally to a groundwater monitoring well adjacent to the landfill footprint.
- Their key engineering features, liners and leachate collection systems that serve to protect groundwater, are buried under many tens to hundreds of feet of waste. Therefore, once installed, they are extremely difficult to repair or modify.
- The private sector is very active in solid waste management. The vast majority of municipal solid waste in Wisconsin is disposed of in landfills owned by large, publicly traded companies. The waste industry is extremely competitive, and quarterly profitability is a constant pressure. Their focus on short-term profits, coupled with knowledge that environmental consequences will not likely be evident for decades, establishes a unique quandary for managers of these companies.

In consideration of the above, it's clear that plan review is a proactive function that plays a key role in preventing pollution from occurring, i.e. an ounce of prevention is worth a pound of cure. While solid

waste plan review results in few outright denials of submittals, on countless occasions, our staff have worked with owners to avoid poor locations and to modify designs that were clearly faulty. Plan review also provides a point of coordination with other Department programs and allows our staff to keep current on technological developments and the status of individual landfills. Because our staff are aware of current landfill technology and familiar with individual landfills, we are able to competently respond to requests for variances from code requirements and to grant them where appropriate. Finally, the plan review performed by the Waste Program provides a valuable service to the public and affected parties. It also lends credibility and acceptance to Wisconsin's landfill siting process that otherwise would not exist.

### Resources Devoted to Plan Review and Current Streamlining Efforts

Waste Management Program resources devoted to Solid Waste Management have dropped from 52 FTEs in the mid-1990s to approximately 38 FTEs in FY 03. Further reductions will occur as a result of the recently completed biennial budget. Roughly half of these 38 FTEs are devoted to technical review of plan submittals. The remaining FTEs are devoted to activities such as complaint response, inspections, review of monitoring information, enforcement, and program management duties. Consequently, several years ago Waste Program supervisors and staff began discussing plan review streamlining with groups of internal and external stakeholders. The first review was a Continuous Quality Improvement Study completed in 1999, followed by implementation of its recommendations. This CQI study focused on defining, improving and streamlining internal Department processes following the Department's reorganization. The second major review began in December of 2002 and completed this month. We have reached consensus with stakeholders on a series of administrative code and other changes aimed at streamlining landfill and other solid waste plan review. The attached table "Recommendations for Waste Plan Review Streamlining" contains the consensus recommendations. We anticipate requesting permission to begin the rulemaking process in December 2003. These proposed rule changes will reduce the time invested by the Department and applicants and will also reduce transactional costs.

### Options for Conducting Solid Waste Plan Reviews

#### *1. Status Quo*

The current plan review system meets all state and federal requirements. Based on 20-plus years of experience, we know that it protects public health and the environment and ensures adequate disposal capacity for Wisconsin's citizens and businesses. While streamlining efforts have reduced the FTEs necessary to implement the current system, it is resource intensive with approximately 20 FTEs devoted to technical review of plan submittals.

#### *2. Upcoming Process Improvements*

After the recommendations contained in the attached table are implemented, the current plan review process will be significantly streamlined, while all state and federal requirements will continue to be

met. Public health and the environment will continue to be protected, and adequate disposal capacity will continue to exist. Although such estimates are difficult to make, we anticipate workload savings of several FTEs resulting from this streamlining effort.

### *3. Minimum Required to Maintain Subtitle D Authorization from EPA*

Substantial changes to plan review would be very controversial and would require comprehensive revisions to existing statutes and administrative codes. It would also entail working closely with EPA to assure that we maintained authorization to implement federal solid waste laws. This authorization is critical in that it allows us to apply flexibility and discretion where appropriate to the great advantage of our stakeholders. Because receiving authorization from EPA relies heavily on negotiation, the minimum requirements are difficult to ascertain. However, it's clear that DNR would have to assure EPA that federal locational, design, operation, monitoring and financial assurance standards would continue to be met. Consequently, significant staffing resources would continue to be necessary. Finally, changes to Wisconsin's landfill siting law that might be acceptable to EPA could, nevertheless, jeopardize the availability of solid waste disposal capacity in Wisconsin.

### *4. Elimination of Plan Review and Inclusion of Certification/Financial Requirements for Owners/Consultants*

Placing greater responsibility on landfill owners and consultants through certification and financial requirements is something the Waste Program supports. Code revisions occurring in 1996 required more explicit certification statements from engineering consultants involved in oversight of landfill construction. However, there are limits to certifications. Engineers will only certify that a facility had been designed according to generally accepted engineering practices, and that the facility was constructed in accordance with the design. They will not certify that a facility will perform in a given manner.

As mentioned earlier in this memo, landfill owners are required to provide proof of financial assurance for closure of their landfill. While they are perpetually responsible for their landfills, proof of financial assurance for routine long-term care must only be demonstrated for a period of 40 years following landfill closure. Many believe that long-term care will be necessary well beyond 40 years. Financial assurance for remediation of environmental or other problems is not required until a problem is encountered. This is a significant weakness, since owners may not be able to establish financial assurance at the point that it is most needed. The Department is currently working with stakeholders to address whether improvements such as up-front remedial financial assurance and perpetual financial assurance should be pursued.

Increasing certification and financial assurance requirements would reduce the risk of landfills to some degree. However, because of the short term profits/long-term liability nature of landfills mentioned earlier in this memo, significant Department oversight would still be needed



It's very unlikely that Wisconsin could eliminate landfill plan review by DNR and still maintain Subtitle D authorization. Without Subtitle D authorization, all Wisconsin landfill owners would have to petition EPA for any exemptions to locational, design, operation, monitoring, or financial assurance standards. In addition, it is plan review that keeps our staff up to speed with evolving solid waste management practices. As time passed, lack of expertise amongst our staff would prevent us from supporting landfill owners that did petition EPA for exemptions to federal standards. The end result would be Wisconsin landfill owners falling behind other states and being put at an economic disadvantage. Current examples of evolving technology include bioreactors, leachate recirculation, and organic waste processing either in-situ or prior to landfill disposal.

Eliminating of plan review would also result in a loss of coordination of various Department programs that currently takes place in dealing with landfill siting proposals. The credibility of the landfill siting process and the public's acceptance of new landfills would also be affected.

Wisconsin receives no federal money related to solid waste management. However, we currently support approximately 32 FTEs through plan review and license fees. Unless alternate funding sources were found, eliminating plan review would result in a loss of many of these 32 FTEs.

### Conclusions

Plan review is required by state statute and administrative code. It is also necessary for our Department to maintain authorization to implement federal solid waste rules. It helps assure adequate disposal capacity in Wisconsin, and because of the unique nature of landfills, is a very important pollution prevention activity. In recognition of the maturation of the solid waste industry as well as declining Department resources, we embarked upon and are near completion of a very successful streamlining effort that will yield significant results. With our stakeholders, we'll be looking for additional efficiencies as the industry and our agency change.

While plan review does consume significant resources, it is a necessary and worthwhile activity. We believe that any significant changes to our current plan review system would require implementation of supplemental approaches that would also be resource intensive.

Therefore, we ask that you concur with the list of streamlining recommendations made in collaboration with stakeholders. We believe that implementing these recommendations through policy change and process improvement will result in measurable efficiencies for our program. Based on your concurrence, we will proceed to work with stakeholders to implement these recommendations

Approved:



Al Shea, Administrator  
Division of Air and Waste Management

Attachment

cc: Bill Smith – AD/5  
Elizabeth Kluesner – AD/5  
Dennis Mack – WA/3

## Recommendations for Solid Waste Plan Review Streamlining

1. DNR continues to make decisions for Needs and the technical aspects of landfill siting.

Impact: Ensures long-term public health and environmental protection.

2. DNR Waste Program develops guidance to:

- ☐ Improve and clarify Needs process.

Impact: Ensures landfill capacity and reduces staff time to complete Needs assessment.

- ☐ Share draft approvals with externals.

Impact: Monetary and time savings for solid waste facility owners.

3. Revise plan review rules to:

- ☐ Add value to the 'Alternatives to Landfilling' process.

Impact: Will result in realistic, site-specific evaluation of Alternatives.

- ☐ Reduce, appropriately, borrow soil testing and change testing results submittal time.

Impact: Monetary savings and greater flexibility for landfill owners.

- ☐ Expand existing expedited plan modification process to include certain non-landfill facilities and non-liner construction documentation.

Impact: Monetary and time savings and greater flexibility for landfill owners.

- ☐ Allow review staff the discretion to declare as "complete" those Feasibility submittals that are substantially complete.

Impact: Significant monetary and time savings for landfill owners.

- ☐ Expand self-implementing provisions of NR 538.

Impact: Monetary and time savings for solid waste facility owners; increased diversion of waste from Wisconsin's landfills; reduced staff time.

- ☐ Include self-implementing approval and licensing of lower-risk non-landfill facilities.

Impact: Monetary and time savings for solid waste facility owners; reduced staff time.

- ☐ Streamline proposed landfill expansion plan of operation submittals.

Impact: Monetary and time savings for landfill owners; time savings for staff in reviewing; improved facility compliance tracking.

- ☐ Eliminate provision that requires repeated submittal of deed notation annually.

Impact: Time savings for landfill owners.